

## Middle School CTE Courses that lead to Secondary Programs of Study 2012-2013

Middle School Courses			Secondary Programs of Study
5-6 <sup>th</sup> Grade	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade	
<b>Steven Gass, Consultant</b>			<b>615-532-2847</b> <b>steven.gass@tn.gov</b>
		Exploring Agricultural Sciences (0844)	Animal Systems – Pre-Veterinary Animal Systems – Production Animals Power, Structures, & Technical Systems Agri-Business, Food Products & Process Systems Environmental & Natural Resources Systems Plant Systems – Landscaping & Turf science Plant Systems – Horticulture Production Agricultural Education Systems Landscape Design
<b>Joy Smith, Consultant</b>			<b>615-532-6248</b> <b>joy.smith@tn.gov</b>
	Keyboarding (0710)	Keyboarding (0810)	Human Resources Business Management Business Financial Management & Accounting Business Analysis Administration & Information Support Communications Development Financial Planning Banking & finance Public/Nonprofit Management & Administration Electronic Publishing Interactive Multimedia Web/Multimedia Management / Webmaster Programming & Software Development
	Document Formatting (0713)	Document Formatting (0812)	
<b>Emily Williams, Consultant</b>			<b>615-532-2840</b> <b>emily.c.williams@tn.gov</b>
	Teen Living (0739)	Teen Living (0839)	Interior Design Fashion Design Teaching Training Services Pre-K – Early Childhood Education Food & Beverage Services Consumer Services Counseling & Mental Health Services Family & Community Services Nutritional Counseling
<b>Tom D'Apolito, Consultant</b>			<b>615-532-2844</b> <b>tom.dapolito@tn.gov</b>
Exploring Technology (0535/0635)	Inventions & Innovations (0735)	Technological Systems (0835)	Engineering & Technology Science & Mathematics Web Design Production Design Precision Productions Precision Machining

# Agriculture, Food & Natural Resources

**Steven Gass, Consultant**

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Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Animal Systems – Pre Veterinary	Agriscience (HQ) (5171)	Small Animal Care (5172)	Horse Science (5168)	Veterinary Science (5176)
	Principles of Agricultural Sciences (5154)			
Animal Systems – Production Animals	Agriscience (HQ) (5171)	Advanced Principles of Agricultural Sciences (5155)	Livestock Management (5177)	Animal Biotechnology (5186)
	Principles of Agricultural Sciences (5154)			
Power, Structures & Technical Systems	Agriscience (HQ) (5171)	Agricultural Mechanics & Maintenance (5151)	Agricultural Power & Equipment (5152)	Agricultural Engineering (5178)
	Principles of Agricultural Sciences (5154)			
Agribusiness, Food Products & Process Systems	Agriscience (HQ) (5171)	Leadership Communications (5169)	Agricultural Sales & Marketing (5153)	Agricultural Business/Finance (5150)
	Principles of Agricultural Sciences (5154)			Agricultural Economics (5183)*
Environmental & Natural Resource Systems	Agriscience (HQ) (5171)	Forestry Management (5165)	Wildlife Management & Recreation (5174)	Plant & Soil Science (5161)
	Principles of Agricultural Sciences (5154)			
Agricultural Education Systems	Agriscience (HQ) (5171)	Advanced Principles of Agricultural Sciences (5155)	Leadership Communications (5169)	Plant & Soil Science (5161)
	Principles of Agricultural Sciences (5154)			
Plant Systems – Landscaping & Turf Science	Agriscience (HQ) (5171)	Landscaping & Turf Management (5163)	Greenhouse Management (5167)	Plant Biotechnology (5175)
	Principles of Horticultural Sciences (1584)			
Plant Systems – Horticulture Production	Agriscience (HQ) (5171)	Aquaculture / Hydroponics (5159)	Greenhouse Management (5167)	Plant Biotechnology (5175)
	Principles of Horticultural Sciences (1584)	Floral Design (5164)*		

Entry-level courses are not grade-level specific

\* Requires a special Program of Study Request

# Architecture & Construction

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Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Design & Preconstruction	Foundations of Technology (3835)	Computer-Aided Drafting (3848)	Computer-Aided Drafting II (5752 or 3849)	Advanced Drafting & Design (5745 or 3850)
		Computer-Aided Drafting I (5750)		Comp. Aided Drafting & Design II / Adv. Drafting & Design (5751 or 3851)
Construction Electrical	Career Management Success (5701) <i>(optional)</i>	Construction Core (5814)	Electrical I (5815)	Electrical II (5816)
Construction Masonry & Concrete	Career Management Success (5701) <i>(optional)</i>	Construction Core (5814)	Masonry I (5820)	Masonry II (5821)
			Concrete I (5753)	Concrete II (5754)
Construction Plumbing	Career Management Success (5701) <i>(optional)</i>	Construction Core (5814)	Plumbing I (5822)	Plumbing II (5823)
Construction HVAC/R	Career Management Success (5701) <i>(optional)</i>	Construction Core (5814)	HVAC/R I (5817)	HVAC/R II (5818)
Construction Welding	Career Management Success (5701) <i>(optional)</i>	Introduction to Welding (5819)	Basic Principles Welding (5747)	Advanced Welding Applications & Certification (5746)
Construction Carpentry	Career Management Success (5701) <i>(optional)</i>	Construction Core (5814)	Carpentry I (5748)	Carpentry II (5749)
Interior Design	Family & Consumer Sciences (5603)	Interior Design (5626)	Housing (5614)	Life Connections (5623)
	Personal, Academic & Career Excellence (5624)			
Landscape Design	Principles of Horticultural Sciences (1584)	Landscaping & Turf Management (5163)	Computer-Aided Drafting (3848)	Greenhouse Management (5167)
	Agriscience (1571)		Computer-Aided Drafting I (5750)	

Entry-level courses are not grade-level specific

## Arts, Audio/Video Technology & Communications

**Marty Willis, Executive Director of Student Success**

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Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Graphic Communications	Career Management Success (5701) <i>(optional)</i>	Digital Arts & Design I (5825)	Printing Graphics Technology I (5829)	Printing Graphics Technology II (5772)
Design Communications	Digital Arts & Design I (5825)	Digital Arts & Design II (5827)	Digital Arts & Design III (5828)	Animation/Simulation & Motion Graphics (5773)
			Digital Arts & Design II/Digital Arts & Design III (5826)	
Audio Technology	Career Management Success (5701) <i>(optional)</i>	Audio Production I (5774)	Audio Production II (5776)	Audio Production III (5777)
				Audio Production II / Audio Production III (5775)
Journalism & Broadcasting	Career Management Success (5701) <i>(optional)</i>	Broadcasting I (5778)	Broadcasting II (5779)	Broadcasting III (5824)
Fashion Design	Family & Consumer Sciences (5603)	Fashion Design & Merchandising (5621)	Textiles & Apparel (5619)	Life Connections (5623)
	Personal, Academic & Career Excellence (5624)			

Entry-level courses are not grade-level specific

# Business Management & Administration

Joy Smith, Consultant

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Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Human Resources	Word Processing (3781)	eBusiness Communications (3704)	Interactive Multimedia Presentation (3746)	Advanced Computer Applications (3770)
Business Management	Personal Finance (3766, 5038 or 5613)	Accounting I (3779)	Business Management (3707)	Virtual Enterprise International (3757 or 3762)
	Financial Planning (3717)			
Business Financial Management & Accounting	Computer Application (3718)	Accounting I (3779)	Accounting II (3780)	Business Management (3707)
Business Analysis	Personal Finance (3766, 5038 or 5613)	Accounting I (3779)	Business Economics (3755 or 3765)	Banking & Finance (3756)
	Financial Planning (3717)		Spreadsheet Applications (3729)	
Administrative & Information Support	Document Formatting (3775)	Word Processing (3781)	eBusiness Communications (3704)	Administrative Management (3737)
	Database Design/Management (3735)			
Communications Development	Word Processing (3781)	Business Principles (3771)	eBusiness Communications (3704)	Administrative Management (3737)

Entry-level courses are not grade-level specific

## Education & Training

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Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Teacher Training Services	Family & Consumer Sciences (5603)	Child & Lifespan Development (5625)	Life Connections (5623)	Teaching as a Profession (5622)
	Personal, Academic & Career Excellence (5624)			
Teacher Training Services – Pre-K Early Childhood Education	Family & Consumer Sciences (5603)	Early Childhood Education Careers I (5650)	Early Childhood Education Careers II (5660)	Early Childhood Education Careers III (5661)
	Personal, Academic & Career Excellence (5624)			Early Childhood Education Careers II/III (5662)

Entry-level courses are not grade-level specific

## Finance

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Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Banking & Finance	Computer Applications (3718)	Accounting I (3779)	Personal Finance (3766, 5038 or 5613)	Banking & Finance (3756)
			Financial Planning (3717)	
Financial Planning	Computer Applications (3718)	Personal Finance (3766, 5038 or 5613)	American Business/ Legal Systems (3719 or 3726)	Banking & Finance (3756)
		Financial Planning (3717)	Business Economics (3755 or 3765)	

Entry-level courses are not grade-level specific

### Government Public Administration

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Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Public/Nonprofit Management & Administration	Personal Finance (3766, 5038 or 5613)	Financial Planning (3717)	eBusiness Communications (3704)	Administrative Management (3737)
				Business Management (3707)
National Security	Career Management Success (5701) <i>(optional)</i>	Criminal Justice I (5401)	Criminal Justice II (5402)	Criminal Justice III Forensic Science Investigation (5403)
				Criminal Justice II/ III (5343)

Entry-level courses are not grade-level specific

### Health Science

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Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Biotechnology Research & Design	Health Science Education (5526)	Diagnostic Medicine (5521)	Anatomy & Physiology (5516HQ or 5517)	Biomedical Applications (5518HQ or 5519)
Biotechnology & Forensic Science Research & Development	Health Science Education (5526)	Diagnostic Medicine (5521)	Anatomy & Physiology (5516HQ or 5517)	Forensic Science (5523HQ or 5524)
Diagnostic Services	Health Science Education (5526)	Rehabilitation Careers (5515)	Diagnostic Medicine (5521)	Clinical Internship (5520)
Health Informatics	Health Science Education (5526)	Diagnostic Medicine (5521)	Health Information Technology (5525)	Clinical Internship (5520)
Therapeutic Services	Health Science Education (5526)	Medical Therapeutics (5527)	Anatomy & Physiology (5516HQ or 5517)	Nursing Education (5528)
Therapeutic Emergency Services	Health Science Education (5526)	Medical Therapeutics (5526)	Anatomy & Physiology (5516HQ or 5517)	Emergency Medical Services (5522)

Entry-level courses are not grade-level specific

**Hospitality & Tourism****Sue Tucker, Consultant****615-532-2835****sue.tucker@tn.gov**

Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Food & Beverage Services	Family & Consumer Sciences (5603)	Culinary Arts I ( 5663 or 5386)	Culinary Arts II (5664 or 5387)	Culinary Arts III (5665 or 5388)
	Personal, Academic & Career Excellence (5624)			Culinary Arts II/III (5659 or 5384)
Hospitality & Tourism Management		Marketing & Management I Principles (5000 or 5030)	Travel & Tourism Operations (5003)	Hospitality Management (5026)
Recreation, Attractions, Sports, & Entertainment		Marketing & Management I Principles (5000 or 5030)	Travel & Tourism Operations (5003)	Sports & Entertainment Marketing (5023)

Entry-level courses are not grade-level specific



# Human Services

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Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Family & Community Services	Family & Consumer Sciences (5603)	Child & Lifespan Development (5625)	Nutrition & Foods (5609)	Life Connections (5623)
	Personal, Academic & Career Excellence (5624)			
Early Childhood Development & Services	Family & Consumer Sciences (5603)	Early Childhood Education Careers I (5650)	Early Childhood Education Careers II (5660)	Early Childhood Education Careers III (5661)
	Personal, Academic & Career Excellence (5624)			Early Childhood Education Careers II/III (5662)
Counseling & Mental Health Services	Family & Consumer Sciences (5603)	Child & Lifespan Development (5625)	Family & Parenting (5606)	Life Connections (5623)
	Personal, Academic & Career Excellence (5624)			
Consumer Services	Family & Consumer Sciences (5603)	Consumer Economics (5602 or 5605)	Personal Finance (5613, 5038 or 3766)	Life Connections (5623)
	Personal, Academic & Career Excellence (5624)			
Nutritional Counseling	Family & Consumer Sciences (5603)	Nutrition & Foods (5609)	Nutrition Science (5615, 5616, 5617 or 5618)	Child & Lifespan Development (5625)
	Personal, Academic & Career Excellence (5624)			
Personal Care Services	Career Management Success (5701) <i>(optional)</i>	Principles of Cosmetology (5391)	Design Principles of Cosmetology (5394)	Chemistry of Cosmetology (5392)
Cosmetology	Career Management Success (5701) <i>(optional)</i>	Principles of Cosmetology (5391)	Design Principles of Cosmetology (5394)	Design Principles / Chemistry of Cosmetology (5393)
Barbering	Career Management Success (5701) <i>(optional)</i>	Barbering I (5344)	Barbering II (5345)	Barbering III (5346)

Entry-level courses are not grade-level specific

# Information Technology

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Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Web/Multimedia Management/ Webmaster	Computer Applications (3718)	Interactive Multimedia Presentation (3746)	Web Design Essentials (3768)	Web Design Applications (3769)
Programming & Software Development	Computer Applications (3718)	Computer Programming I (3772)	Computer Programming II (3773)	Game Programming (3774)
Networking Systems	Information Technology Foundations (5842)	Computer Systems (5841)	Networking (5844)	Cabling & Internetworking (5840)
				IT Clinical (5843)
Web Design	Career Management Success (5701) <i>(optional)</i>	Web Page Design I Foundations (5847)	Web Page Design II Site Designer (5857)	Web Page Design III eCommerce (5839)
	Foundations of Technology (3835)	Web Site I – Foundations (3840)	Web Design II Site Designer (3841)	Web Page Design III eCommerce (3842)
Programming & Gaming	Career Management Success (5701) <i>(optional)</i>	Information Technology Foundations (5842)	Programming & Logic I (5845)	Programming & Logic II (5846)
Electronic Publishing	Word Processing (3781)	eBusiness Communications (3704)	Desktop Publishing (3741)	Advanced Computer Applications (3770)
Interactive Media	Computer Applications (3718)	Interactive Multimedia Presentation (3746)	Desktop Publishing (3741)	Advanced Computer Applications (3770)

Entry-level courses are not grade-level specific

## Law, Public Safety, Corrections & Security

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Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Law Enforcement Services	Career Management Success (5701) <i>(optional)</i>	Criminal Justice I (5401)	Criminal Justice II (5402)	Criminal Justice III Forensic Science Investigation (5403)
				Criminal Justice II & III (5343)
Security & Protective Services	Information Technology Foundations (5842)	Computer Systems (5841)	Networking (5844)	Cabling & Internetworking (5840)
				IT Clinical (5843)

Entry-level courses are not grade-level specific

**Manufacturing**  
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**Tom D'Apolito, Consultant**

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Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Production Design	Career Management Success (5701) <i>(optional)</i>	Computer Aided Drafting I (3848 or 5750)	Computer Aided Drafting II (3849 or 5752)	Advanced Drafting & Design (5745)
	Foundations of Technology (3835)			Computer Aided Drafting II / Advanced Drafting & Design (3851 or 5751)
Operations & Maintenance	Career Management Success (5701) <i>(optional)</i>	Introduction to Welding (5819)	Basic Principles Welding (5747)	Advanced Welding Application & Certification (5746)
Precision Productions	Principles of Engineering (3845 or 5836)	Principles of Manufacturing (3843 or 5830)	Principles of Machining & Manufacturing (3844 or 5837)	Manufacturing Applications (3847 or 5835)
Precision Machining	Principles of Machining (3852 or 5838)	Digital Electronics (3846 or 5831)	Principles of Machining & Manufacturing (3844 or 5837)	Manufacturing Applications (3847 or 5835)
Industrial Maintenance	Career Management Success (5701) <i>(optional)</i>	Intro to Electromechanical (5834)	Electromechanical I (5832)	Electromechanical II (5833)
Engineering	Introduction to Engineering Design (PLTW) (5793)	Principles of Engineering (PLTW) (5791)	Aerospace Engineering (PLTW) (5796)	Engineering Design & Development (PLTW) (5798)
			Civil Engineering (PLTW) (5795)	
			Biotechnical Engineering (PLTW) (5797)	
			Digital Electronics (PLTW) (5792)	
			Computer Integrated Manufacturing (PLTW) (5794)	

Entry-level courses are not grade-level specific

**Marketing**  
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Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Global Marketing		Marketing & Management I Principles (5000 or 5030)	Retail Operations (5022 or 5052)	International Business & Marketing (5015 or 5045)
Organizational Management		Marketing & Management I Principles (5000 or 5030)	Marketing & Management II – Advanced Strategies (5001)	Virtual Enterprise International (5057, 5062, 3757, 3762)
			Entrepreneurship (5005 or 5035)	
Marketing Communication		Marketing & Management I Principles (5000 or 5030)	Marketing & Management II – Advanced Strategies (5001)	Advertising & Public Relations (5016)
Entrepreneurship		Marketing & Management I Principles (5000 or 5030)	Marketing & Management II – Advanced Strategies (5001)	Entrepreneurship (5005 or 5035)
Marketing Research		Marketing & Management I Principles (5000 or 5030)	Marketing & Management II – Advanced Strategies (5001)	Market Research & Analysis (5017)
Merchandising		Marketing & Management I Principles (5000 or 5030)	Marketing & Management II – Advanced Strategies (5001)	Retail Operations (5022 or 5052)
Marketing & Finance		Marketing & Management I Principles (5000 or 5030)	Marketing & Management II – Advanced Strategies (5001)	Personal Finance (5613, 3766, 5038)
				Personal Finance & Building Wealth (5037)

Entry-level courses are not grade-level specific

### Science, Technology, Engineering & Mathematics

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Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Engineering & Technology	Foundations of Technology (3835)	Technological Issues (3836)	Advanced Design Applications (3838)	Engineering Design (3839)
Science & Mathematics	Foundations of Technology (3835)	Technological Issues (3836)	Advanced Technological Applications (3837)	Problems & Solutions in Technology (3813)

Entry-level courses are not grade-level specific

### Transportation, Distribution & Logistics

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Program of Study	CTE Coursework			
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Automotive Technology	Transportation Core (5812)	Automotive: Brakes (5726)	Automotive: Suspension & Steering (5729)	Automotive: Electrical / Electronics (5727)
				Automotive: Engine Performance (5728)
Collision Repair Technology	Transportation Core (5812)	Collision Repair: Nonstructural (5803)	Collision Repair: Structural (5805)	Collision Repair: Painting & Refinishing (5804)
Diesel Technology	Transportation Core (5812)	Diesel: Preventive Maintenance (5808)	Diesel: Electrical / Electronic (5806)	Diesel Engine (5807)
Aviation Maintenance		Career Management Success (5701) <i>(optional)</i>	Aviation Maintenance I (5801)	Aviation Maintenance II (5802)
Aviation Flight		Career Management Success (5701) <i>(optional)</i>	Introduction to Aerospace (5809)	Theory of Flight (5811)
2-4 Cycle Engines	Transportation Core (5812)	2-4 Cycle Engine I (5723)	2-4 Cycle Engine II (5724)	2-4 Cycle Engine III (5725)
Distribution & Logistics	Career Management Success (5701) <i>(optional)</i>	Principles of Transportation, Distribution & Logistics (5810)	Warehouse & Distribution I (5813)	Warehouse & Distribution II (5722)

Entry-level courses are not grade-level specific